

ABSTRACT

The present invention provides a high strength hot rolled steel sheet raised in Si content, wherein a  
5 conversion coating can be formed homogeneously over the entire surface of the steel sheet, no new step is added in the production of the steel sheet, and quality control is also facilitated, comprising, by mass%, C: 0.03 to 0.15%, Si: 0.8 to 3.0%, Mn: 0.5 to 3.0%, P: 0.07% or less,  
10 S: 0.01% or less, Al: 0.015 to 0.1%, N: 0.001 to 0.008%, and, if necessary, having Ti, Nb, etc. added, the oxides on the steel sheet surface having an Si concentration of 3.5% or less and an Mn concentration of 3.5% or less. Preferably, the average roughness Ra is 3.0  $\mu\text{m}$  or less  
15 and the pitting due to pickling is an average of 5 or less in 10  $\mu\text{m}$  side squares. The scale after the hot rolling is washed off by dipping the sheet in a solution having an HCl concentration of 7 to 15% and an Fe ion concentration of 4 to 12% at a solution temperature of 80  
20 to 98°C for 40 sec or more.